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<10> Nelsestuen, Gary L.

<120> MODIFIED VITAMIN K-DEPENDENT POLYPEPTIDES

<130> 09531-016002

<140> US 10/031,005

<141> 2001-10-29

<150> PCT/US00/11416

<151> 2000-04-28

<150> US 09/302,239

<151> 1999-04-29

<150> US 08/955,636

<151> 1997-10-23

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<212> PRT

<213> Homo sapiens

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<222> (1)...(44)

<223> Xaa = gamma carboxyglutamic acid or glutamic acid

<400> 1

Ala Asn Ser Phe Leu Xaa Xaa Leu Arg His Ser Ser Leu Xaa Arg Xaa

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5

10

15

Cys Ile Xaa Xaa Ile Cys Asp Phe Xaa Xaa Ala Lys Xaa Ile Phe Gln

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25

30

Asn Val Asp Asp Thr Leu Ala Phe Trp Ser Lys His

35

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<210> 2

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<212> PRT

<213> Bos taurus

<220>

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<222> (1)...(44)

<223> Xaa = gamma carboxyglutamic acid or glutamic acid

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Ala Asn Ser Phe Leu Xaa Xaa Leu Arg Pro Gly Asn Val Xaa Arg Xaa

1

5

10

15

Cys Ser Xaa Xaa Val Cys Xaa Phe Xaa Xaa Ala Arg Xaa Ile Phe Gln

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Asn Thr Xaa Asp Thr Met Ala Phe Trp Ser Phe Tyr		
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<223> Xaa = gamma carboxyglutamic acid or glutamic acid

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Cys Lys Xaa Xaa Gln Cys Ser Phe Xaa Xaa Ala Arg Xaa Ile Phe Lys			
20	25	30	
Asp Ala Xaa Arg Thr Lys Leu Phe Trp Ile Ser Tyr			
35	40		

<210> 4
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<400> 4			
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1	5	10	15
Cys Arg Xaa Xaa Leu Cys Ser Phe Xaa Xaa Ala His Xaa Ile Phe Arg			
20	25	30	
Asn Xaa Xaa Arg Thr Arg Gln Phe Trp Val Ser Tyr			
35	40		

<210> 5
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<400> 5			
Tyr Asn Ser Gly Lys Leu Xaa Xaa Phe Val Gln Gly Asn Leu Xaa Arg			
1	5	10	15
Xaa Cys Met Xaa Xaa Lys Cys Ser Phe Xaa Xaa Ala Arg Xaa Val Phe			
20	25	30	
Xaa Asn Thr Xaa Arg Thr Thr Xaa Phe Trp Lys Gln Tyr			
35	40	45	

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Tyr Asn Ser Gly Lys Leu Xaa Xaa Phe Val Gln Gly Asn Leu Xaa Arg
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Xaa Cys Met Xaa Xaa Lys Cys Ser Phe Xaa Xaa Ala Arg Xaa Val Phe
    20          25          30
Xaa Asn Thr Xaa Lys Arg Thr Thr Xaa Phe Trp Lys Gln Tyr
    35          40          45

<210> 7
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<220>
<223> Protein C mutagenic oligonucleotide

<400> 7
aaatataac gactcactat agggagaccc aagctt                         36

<210> 8
<211> 42
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<400> 8
gcactccgc tccaggctgc tgggacggag ctcctccagg aa                         42

<210> 9
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<212> DNA
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<223> Protein C mutagenic oligonucleotide

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acgctccacg ttgccgtgcc gcagctcctc taggaa                         36

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ttccttagagg agctgcggca cggcaacgtg gagcgt 36

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<400> 14
gccaaaggaaa ttttcgaaga tgtggatgac acactg 36

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<223> Xaa = gamma carboxyglutamic acid or glutamic acid

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Xaa Cys Leu Xaa Xaa Pro Cys Ser Arg Xaa Xaa Ala Phe Xaa Ala Leu
    20          25          30
Xaa Ser Leu Ser Ala Thr Asp Ala Phe Trp Ala Lys Tyr
    35          40          45

<210> 18
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<213> Bos taurus

<220>
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<223> Xaa = carboxyglutamic acid or glutamic acid

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Cys Leu Xaa Xaa Ala Cys Ser Leu Xaa Xaa Ala Arg Xaa Val Phe Xaa
    20          25          30
Asp Ala Xaa Gln Thr Asp Xaa Phe Trp Ser Lys Tyr
    35          40

<210> 19
<211> 44
<212> PRT
<213> Homo sapiens

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<221> MOD_RES
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<223> Xaa = carboxyglutamic acid or glutamic acid

<400> 19
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Cys Ile Xaa Xaa Leu Cys Asn Lys Xaa Xaa Ala Arg Xaa Val Phe Xaa
    20          25          30
Asn Asp Pro Xaa Thr Asp Tyr Phe Tyr Pro Lys Tyr
    35          40

<210> 20
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<213> Homo sapiens

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<223> Xaa = carboxyglutamic acid or glutamic acid

<400> 20
Ala Gly Ser Tyr Leu Leu Xaa Xaa Leu Phe Xaa Gly Asn Leu Xaa Lys
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Xaa Cys Tyr Xaa Xaa Ile Cys Val Tyr Xaa Xaa Ala Arg Xaa Val Phe
    20          25          30
Xaa Asn Xaa Val Val Thr Asp Xaa Phe Trp Arg Arg Tyr
    35          40          45

<210> 21
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<223> Xaa = carboxyglutamic acid or glutamic acid

<400> 21
Ala Gly Ser Tyr Leu Leu Xaa Xaa Leu Phe Xaa Gly His Leu Xaa Lys
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Lys Cys Trp Xaa Xaa Ile Cys Val Tyr Xaa Xaa Ala Arg Xaa Val Phe
    20          25          30
Xaa Asp Asp Xaa Thr Thr Asp Xaa Phe Trp Arg Thr Tyr
    35          40          45

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